

IN THE CLAIMS:

1. An electrostatic attraction mechanism, comprising:
  - a dielectric block having an attraction surface,
  - a pair of attraction terminals which are mounted inside the dielectric block, and
  - a power source for applying a voltage to each of the attraction terminals to electrostatically attract a plate-shaped object to the dielectric block by inducing static electricity on the attraction surface,wherein the voltage applied to each of the terminals can be individually adjusted in order to control a surface potential of the plate shaped object.
2. The electrostatic attraction mechanism of claim 1, wherein a plurality of pairs of attraction terminals are mounted inside the dielectric block.
3. The electrostatic attraction mechanism of claim 2, wherein the voltage applied to each of the plurality of pairs of terminals can be individually adjusted in order to control the surface potential of the plate shaped object.
4. An electrostatic attraction mechanism, comprising:
  - a dielectric block having an attraction surface,
  - a pair of attraction terminals which are mounted inside the dielectric block,
  - means for applying a voltage to each of the attraction terminals to electrostatically attract a plate-shaped object to the dielectric block by inducing static electricity on the attraction surface, and
  - means for individually adjusting the voltage applied to each of the terminals in order to control a surface potential of the plate shaped object.
5. The electrostatic attraction mechanism of claim 4, wherein a plurality of pairs of attraction terminals are mounted inside the dielectric block.

6. The electrostatic attraction mechanism of claim 5, wherein the voltage applied to each of the plurality of pairs of terminals can be individually adjusted in order to control the surface potential of the plate shaped object.

7. A surface processing method, comprising the steps of:

holding a plate-shaped object in a prescribed position inside a processing chamber on an attraction surface of a dielectric block, the dielectric block having a pair of attraction terminals mounted inside the dielectric block,

electrostatically attracting the plate-shaped object to the dielectric block by applying a voltage to the pair of attraction terminals to induce static electricity on the attraction surface,

independently controlling the voltages applied to each of the respective attraction terminals constituting said pair of attraction terminals to adjust a surface potential of the plate-shaped object in order to suppress injection of charged particles into the plate-shaped object, and

processing is carried out while the plate-shaped object is attracted to the dielectric block.

8. The method of claim 7, wherein the controlling step is carried out while determining a relationship between the applied voltages and the surface potential by measuring in advance the surface potential of the plate-shaped object while respectively changing the voltages applied to the attraction terminals, and controlling the voltages applied to the attraction terminals in accordance with this relationship.

9. A surface processing device, comprising:

a processing chamber in which prescribed processing is carried out on a surface of a plate-shaped object inside the processing chamber,

an electrostatic attraction mechanism according to claim 1 for holding the plate-shaped object in a prescribed position inside the processing chamber, and

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a control part which controls said power source in order to suppress the injection of charged particles into the plate-shaped object.

10. The surface processing device according to Claim 9, wherein said control part has a recording part and a correspondence table comprising data on a relationship between the applied voltages and the surface potential, the correspondence table being obtained by measuring in advance the surface potential of the plate-shaped object while respectively changing the voltages applied to the attraction terminals and recording the respective voltages and surface potential in the recording part, and the control part controls said power source with a pattern of applied voltages selected in accordance with the correspondence table.

11. A surface processing device, comprising:

a processing chamber in which prescribed processing is carried out on a surface of a plate-shaped object inside the processing chamber, and

an electrostatic attraction mechanism according to claim 4 for holding the plate-shaped object in a prescribed position inside the processing chamber.

12. The surface processing device according to Claim 11, further comprising a recording part and a correspondence table comprising data on a relationship between the applied voltages and the surface potential, the correspondence table being obtained by measuring in advance the surface potential of the plate-shaped object while respectively changing the voltages applied to the attraction terminals and recording the respective voltages and surface potential in the recording part, and the adjusting means controls said applying means with a pattern of applied voltages selected in accordance with the correspondence table.